

# TABLE OF CONTENTS

---

Page Number

## EXECUTIVE SUMMARY

### 1.0 PURPOSE AND NEED OF THE PROPOSED ACTION

1.1	Introduction.....	1.1
1.2	Brief Description of the Park and Surrounding Area.....	1.1
1.3	Purpose of and Need for Action .....	1.4
1.3.1	Purpose of the Plan.....	1.4
1.3.2	Need for the Plan .....	1.4
1.3.3	Issues and Concerns .....	1.4
1.3.4	Decision Points .....	1.8
1.4	Guidance for the Planning Effort.....	1.8
1.4.1	Park Purpose .....	1.8
1.4.2	Park’s Significance .....	1.10
1.4.3	Mission Goals.....	1.12
1.4.4	Special Mandates .....	1.12
1.4.5	Servicewide Laws and Policies.....	1.13
1.5	Resources Potentially at Risk .....	1.15
1.6	Other Projects in the Area.....	1.16

### 2.0 DESCRIPTION OF MANAGEMENT ZONES AND ALTERNATIVES

2.1	Description of Alternatives for Evaluation.....	2.2
2.1.1	Elements Common to All Alternatives.....	2.2
2.1.2	Alternative A – Status Quo/Continue Current Management Practices.....	2.3
2.1.3	Alternative B – Preferred Alternative .....	2.6
2.2	Summary of Impacts .....	2.10
2.3	Potential Management Prescriptions .....	2.13
2.3.1	Canal Zone.....	2.13
2.3.2	Cultural and Natural Zone .....	2.13
2.3.3	Mather Gorge Zone.....	2.15
2.3.4	Developed Zone.....	2.16
2.3.5	Application of Management Prescriptions .....	2.18
2.4	Alternatives Considered but Eliminated.....	2.20
2.4.1	Establish Additional Visitor Nodes.....	2.20
2.4.2	Establish an Additional Access Road to the Park .....	2.20
2.4.3	Provide a Shuttle to the Park .....	2.20
2.4.4	Eliminate Bicycles and Horses from the Park’s Trail System .....	2.21
2.4.5	Provide Car-Top Boat Access at Sandy Landing and Parking at Quarry .....	2.21
2.4.6	Construct a Second New Facility .....	2.21
2.4.7	Construct a New Trail along Old Dominion Drive/Route 193 .....	2.21
2.5	Environmentally Preferred Alternative.....	2.22

### 3.0 AFFECTED ENVIRONMENT

3.1	Land Use and Socio-Economic Conditions .....	3.1
3.1.1	Land Use and Property Boundaries .....	3.1
3.1.2	Visitation and Visitor Activities .....	3.4
3.1.3	Community Facilities .....	3.12
3.1.4	Neighboring Population and Socio-Economic Conditions.....	3.12

TABLE OF CONTENTS

3.2 Cultural Resources..... 3-15

3.2.1 Summary of Great Falls Park History ..... 3-15

3.2.2 Archaeological Resources..... 3-16

3.2.3 Historic Resources..... 3-17

3.2.4 Viewsheds ..... 3-22

3.3 Natural Environment ..... 3-25

3.3.1 Geophysical Resources ..... 3-25

3.3.2 Water Resources ..... 3-27

3.3.3 Biological Resources ..... 3-32

3.3.4 Air Quality..... 3-38

3.3.5 Noise Levels ..... 3-39

3.4 Transportation Systems ..... 3-42

3.5 Site Utilities ..... 3-47

3.5.1 Water ..... 3-47

3.5.2 Sanitary Sewer ..... 3-47

3.5.3 Electric Supply ..... 3-47

3.5.4 Telephone System..... 3-48

3.5.5 Gas Supply ..... 3-48

3.5.6 Stormwater Drainage ..... 3-48

**4.0 ENVIRONMENTAL CONSEQUENCES**

4.1 Impacts Common to All Alternatives ..... 4-2

4.1.1 Impacts on Land Use and Socio-Economic Conditions ..... 4-2

4.1.2 Impacts on Cultural Resources ..... 4-3

4.1.3 Impacts on Natural Resources..... 4-4

4.1.4 Impacts on Transportation Systems..... 4-5

4.2 Alternative A – Status Quo/Continue Current Management Practices ..... 4-6

4.2.1 Impacts on Land Use and Socio-Economic Conditions ..... 4-6

4.2.2 Impacts on Cultural Resources ..... 4-7

4.2.3 Impacts on Natural Resources..... 4-8

4.2.4 Impacts on Transportation Systems..... 4-9

4.2.5 Impacts on Site Utilities ..... 4-10

4.2.6 Sustainability and Long-Term Management ..... 4-10

4.3 Alternative B – Resource Enhancement Alternative ..... 4-11

4.3.1 Impacts on Land Use and Socio-Economic Conditions ..... 4-11

4.3.2 Impacts on Cultural Resources ..... 4-13

4.3.3 Impacts on Natural Resources..... 4-15

4.3.4 Impacts on Transportation Systems..... 4-18

4.3.5 Impacts on Site Utilities ..... 4-19

4.3.6 Sustainability and Long-Term Management ..... 4-20

**5.0 APPENDICES**

A. Cost Estimates ..... A.1

B. References..... A.3

C. Capper-Cramton Act..... A.5

D. List of Acronyms ..... A.9

E. List of Preparers ..... A.11

F. List of Contacts from Agencies and Organizations ..... A.13

G. Index ..... A.15

<b>LIST OF FIGURES</b>		Page Number
1.1	Regional Location Map .....	1.2
1.2	Aerial Map .....	1.3
1.3	Park Facilities .....	1.5
2.1	Alternative A (Continue Current Management Practices) .....	2.5
2.2	Alternative B (Preferred Alternative) .....	2.7
2.3	Alternative B (Application of Management Prescriptions) .....	2.19
3.1	Recreational Opportunities .....	3.7
3.2	Existing Trails .....	3.9
3.3	Cultural Resources .....	3.21
3.4	Site Topography and Slopes .....	3.26
3.5	Water Resources.....	3.29
3.6	Sensitive Plants and Habitats .....	3.35
3.7	Summary of Inbound/Outbound Vehicular Flow on a Peak Day .....	3.43

<b>LIST OF TABLES</b>		Page Number
1.1	NPS Management Policies and Conditions to be Achieved.....	1.14
2.1	Description of Alternatives .....	2.8
2.2	Summary of Impacts .....	2.10
3.1	Population Characteristics in the Surrounding Area.....	3.13
3.2	List of Classified Structures within Great Falls Park .....	3.20
3.3	Historic Properties within approximately 2 miles of Great Falls Park.....	3.22
3.4	Priority Conservation Bird Species of Potomac Gorge Upland Forest.....	3.37
3.5	Typical Noise Levels .....	3.40
3.6	Fairfax County Environmental Noise Standards.....	3.41
3.7	FHWA Traffic Related Noise Abatement Criteria.....	3.41

TABLE OF CONTENTS

THIS PAGE IS INTENTIONALLY LEFT BLANK